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NEW SOVIET RAILROAD EQUIPMENT; COMPARISON OF DIESELS WITH STEAM LOCOMOTIVES

MOSCOW BRAKE PLANT DESIGNS NEW AIR VALVE -- Moscow, Vechernyaya Moskva, 27 Oct 52

The Moscow Railroad Car Brake Plant has designed a new-type air brake valve, the MTZ-135. The new valve, which can be installed on either freight or passenger cars, reduces braking distance 20 percent. The plant is making preparations to put the new valve into series production in 1953.

KIEV TRANSSIGNAL PLANT TO INCREASE PRODUCTION IN 1953 -- Moscow, Gudok, 25 Sep 52

In 1953, the Kiev Transsignal Plant will increase its gross output 65 percent. Production of impedance bonds and electric switch machines will be increased 2 - 2.5 times.

NIZHNEDNEPROVSK SWITCH PLANT DELIVERIES ABOVE QUOTA -- Moscow, Gudok, 7 Sep 52

Since 1 September 1952, the Nizhnedneprovsk Switch Plant has delivered hundreds of thousands of rubles worth of material to the railroads above quota.

KALUGA MACHINE PLANT PRODUCES RAIL MOTOR CAR -- Moscow, Vestnik Mashinostroyeniya, No 2, 1949

The Kaluga Railroad Machine Building Plant built a rail motor service car which will be used at railroad repair and construction sites. It will be used to haul workmen, tools, and materials, as well as for inspection trips over railroads.

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Named the AS-1, the new car is equipped with a GAZ-51 engine. It has a 1,524-millimeter gauge, a 3,800-millimeter rigid wheel base, and a maximum load of 20 tons. Its designed weight is 9,000 kilograms, its tractive force at adhesion 1,250 kilograms. It has a 24-passenger seating capacity, and its over-all measurements are 7,370 by 2,850 by 2,870 millimeters.

The car runs on two axles, one of which is the driving axle and the other an idler, or supporting axle. It has cast wheels (Griffin type wheel) with chilled tires. The axle journals are equipped with cone bearings. The car is equipped with automobile-type spring rigging, one per axle, the springs being of the semielliptic type. The car is equipped with both hand and air brakes, with two brake shoes located on each wheel.

It is divided into two parts, one part being used by the driver, the other by passengers. There are three entrances, one into the driver's cab, the other two for the use of passengers. Special heaters, one in each part, provide heat in the car.

KHAR'KOV TRANSPORT MACHINE PLANT BUILDS NEW-TYPE DIESELS -- Kiev, Pravda Ukrainy, 14 Dec 52

Between 1947 and 1950 the Khar'kov Transport Machine-Building Plant built several hundred 1,000-horsepower TE-1 diesel locomotives. A comparison of diesel traction with steam traction reveals that maintenance costs for 100 units are 50-60 million rubles less per year for diesels. Also, the volume of fuel required is 13-14 times less for diesels than for steam locomotives. For example, during the course of a year, 100 diesel locomotives require 35 trains of liquid fuel, whereas 100 steam locomotives require 450 trains of coal. A diesel can run twice the distance of a steam locomotive before the wheel tires must be machined.

Repair costs are also considerably lower in diesel traction. For 1,000 locomotive-kilometers, steam locomotives require 100-120 man-hours on repairs, whereas diesels require 60-70 man-hours for the same distance.

The plant produced the TE-2 diesel, a 2,000-horsepower main-line locomotive, within 2 months after it was designed by plant engineers. The plant has now designed the TE-4 diesel, a gas-generator diesel locomotive. It built its first engine in 2 weeks.

Moscow, Gudok, 6 Nov 52

The TE-2 diesel locomotive is 78 tons lighter in weight and 10 meters shorter than two TE-1 models. Because of its simple design, the TE-2 requires 10-15 percent less labor in building than the TE-1 model. The Khar'kov Transport Machine Building Plant has also designed the TE-3, which is twice as powerful as the TE-2, and the TE-4, a gas-generator diesel locomotive. The latter type can work on either liquid fuel or mixed fuel. It has a 2,000-horsepower capacity and works mainly on solid fuel (approximately 70-75 percent). However, if necessary it can easily switch to work on liquid fuel completely. The new locomotive is made up of three sections. The front and rear sections are the traction units, while the middle section contains the gas generator, a stock of coal, the filtering system, gas coolers, and water.

FAIL TO FULFILL QUOTAS IN THIRD QUARTER 1952 -- Kiev, Pravda Ukrainy, 29 Oct 52

Ukrainian SRR enterprises of the Ministry of Transport Machine Building fulfilled their 1952 third-quarter plan by only 84 percent.

Moscow, Vechernyaya Moskva, 4 Nov 52

The transport machine building enterprises of Moscow fulfilled their 1952 third-quarter plan by only 81 percent.

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